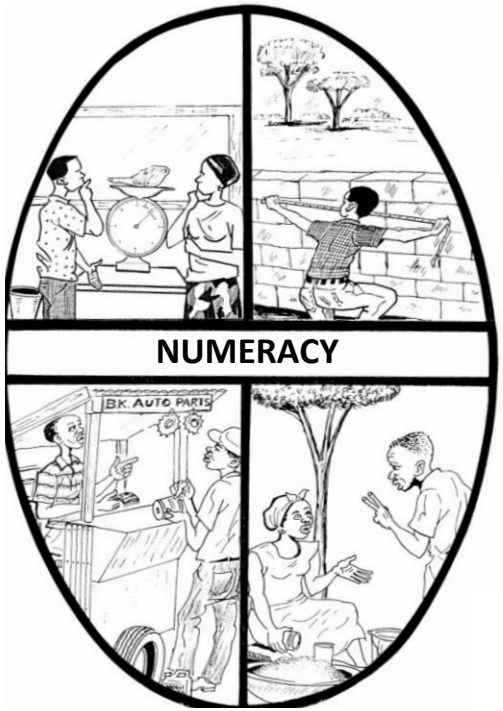
Alternative Basic Education
Learner's Book for Level 1, Semester 1

Content Area: NUMERACY



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Ministry of Education, Government of Liberia
/ith the Core Education Skills for Liberian Youth (CESLY)
Project, USAID Contract # EDH-I-00-05-00031-00

NUMERACY LEVEL 1 SEMESTER 1
LEARNER WORKBOOK

For use with the Alternative Basic Education Curriculum

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MODULE A

Lesson 1: Introduction: The Symbols from 0 to 9

0 1 2 3 4 5 6 7 8 9

Learning Points:

- There are numbers all around us.
- Time is based on numbers.
- Money is also based on numbers.

Directions: Write the numbers 0 - 9 in the boxes below:

Directions: Trace and write the number.

0 1 2 3 4 5 6 7 8 9

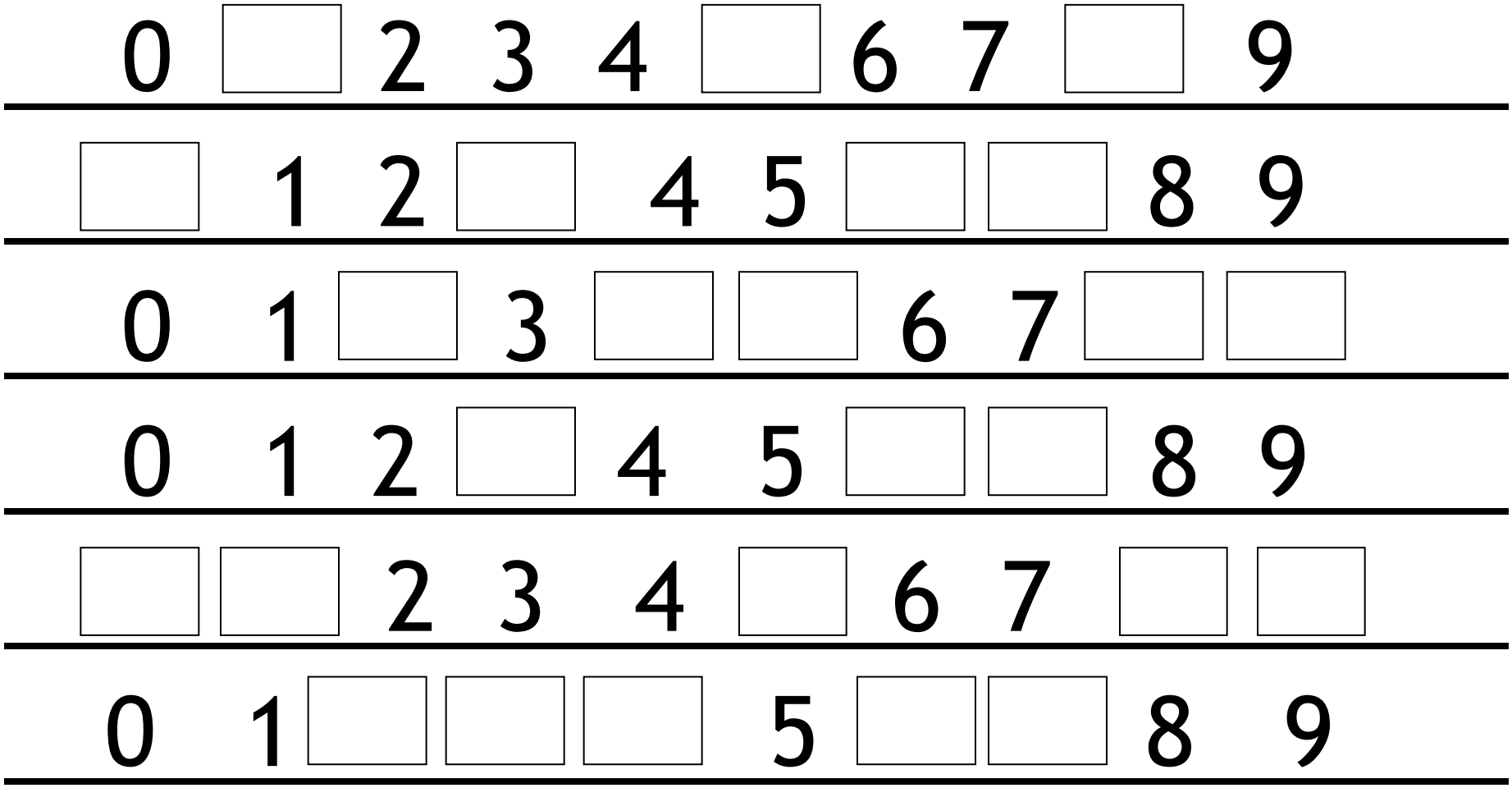
0 1 2 3 4 5 6 7 8 9

0 1 2 3 4 5 6 7 8 9

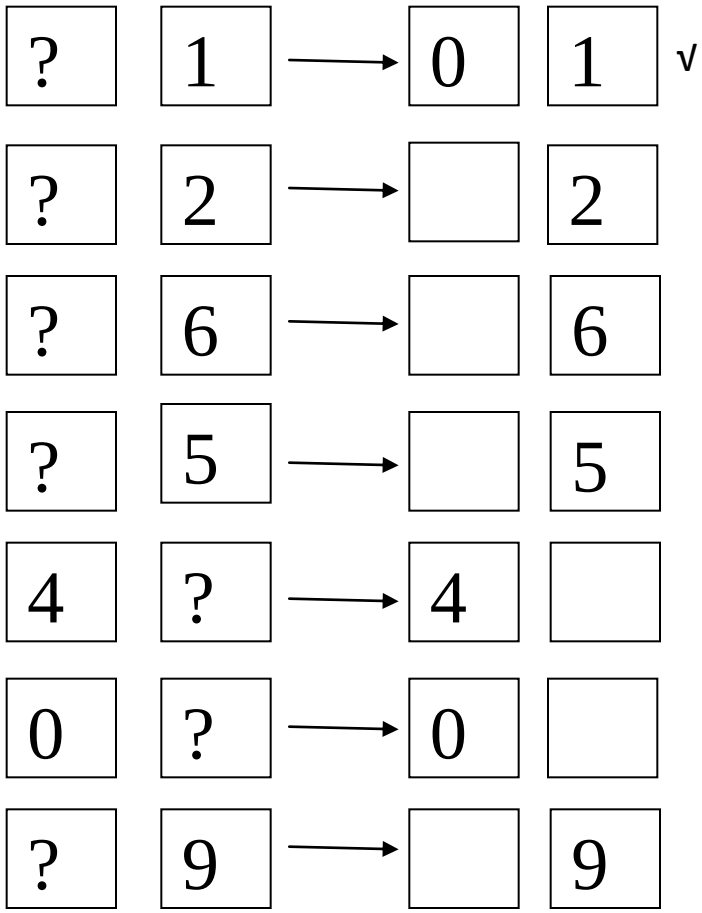
0 1 2 3 4 5 6 7 8 9

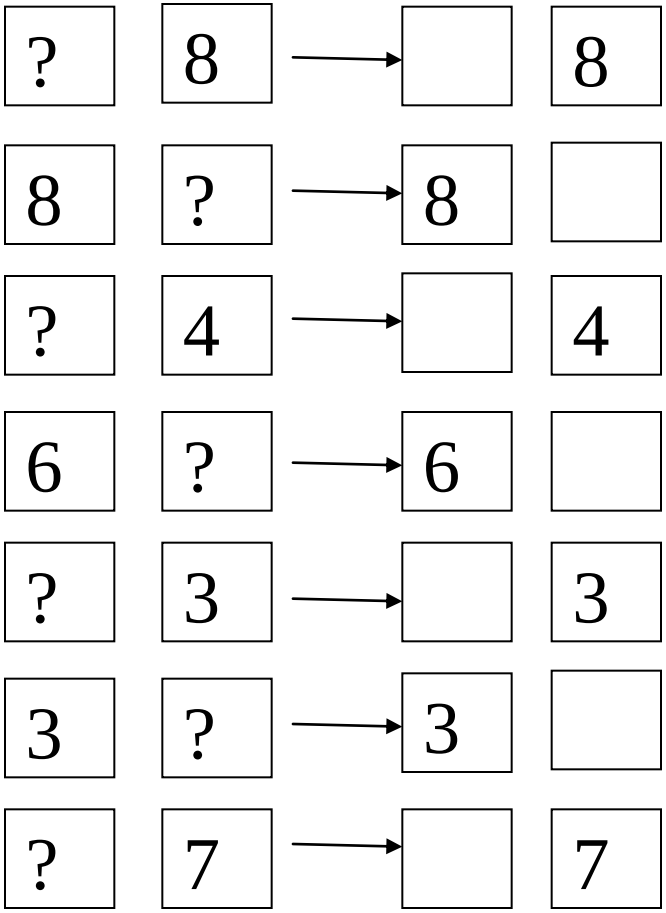
0 1 2 3 4 5 6 7 8 9

Direction: Fill in the missing number



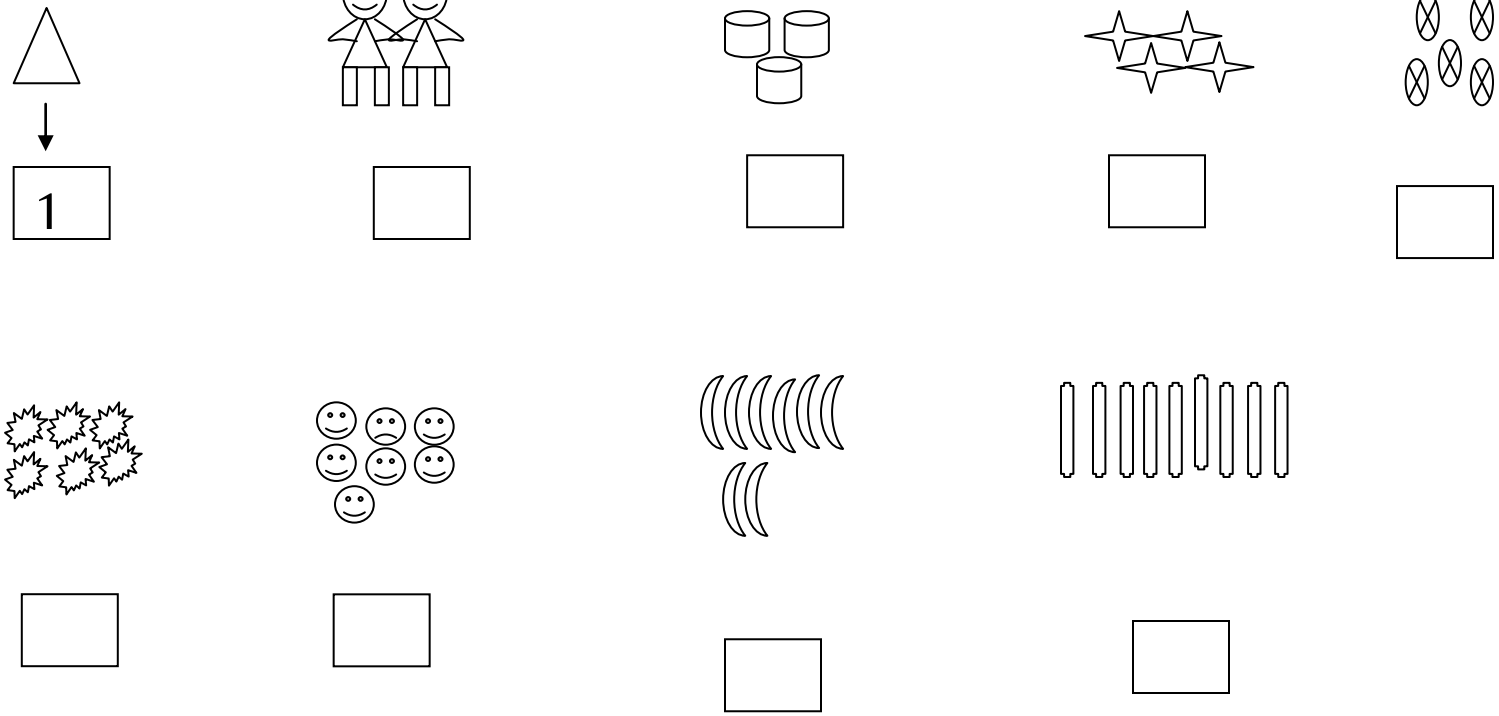
Directions: Write the number that comes before of after.





Directions: Write the number of items in each box below:

Note: The first one is done for you.



MODULE A

Lesson 2: Practicing with Numbers 0 - 9

Values of these numbers

It is important to know what each number is worth especially when we move on to understanding money.

If you throw a die and it shows up  that's number 3.

Learning Point:

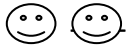
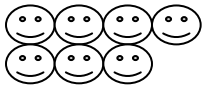
- We need to be able to write and read numbers in letters, this way: one, two, three…., as well as this way: 1, 2, 3, 4….
- There are "single-digit" (1, 2, 3, 4, 5…) and double digit numbers (10, 20, 30, 40, 50, 65, 93…..).
- Key concepts are "more than," "less than" and "equal to".

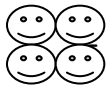
Directions: Write the numbers from 0 to 9 in the corresponding boxes below:

0	2	3	4	5	6	7	8	9

Directions: Write the number of persons:

Note: The first one is done for you.

1.		**One**	1		
2.		Two	_____		
3.		Three	_____		
4.		Six	_____		
5.		Seven	_____		
6.		Eight	_____		

7.		Four	_____	9.	 Nine _____
8.		Five	_____	10.	 Ten _____

Directions: Put an X in the box below to represent each number from 0 to 9:

Note: The first one is done for you.

0	1	2	3	4	5	6	7	8	9
	X								

MODULE A

Lesson 3: Ordering, Comparing Numbers 0-9

Learning Point:

- Number ordering means placing numbers from lower to higher.
- Example: 0 1 2 3
  or
  2 4 6 8

a) Number ordering

Directions: Put these numbers in order from lower to higher:

9 7 4 2 6 5 3 1 0 8

Example

0	**1**								

Directions: Write True or False:

1. The number 7 comes before the number 8. _____
2. The number 0 comes after the number 1. _____
3. The number 2 comes before the number 5. _____
4. The number 4 comes after the number 3. _____

b) Comparing Numbers

Learning Points:

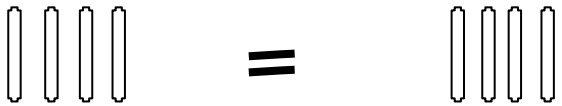
- Place value – the value of the location of a digit in a number. Example: In 425, the location of the digit 2 has a place value of ten while the digit itself shows that there are two tens.

- Comparing numbers – when you compare numbers you look at the "place value" of each number and tell which one is less, more or whether they are equal.

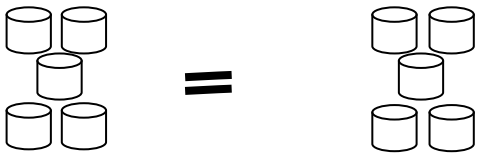
- Symbols and definition:
  = means "equal"
  < means "less than"
  > means " more than"

Examples:

Equal objects =



Four candles **equals** Four candles



Five cups **equals** Five cups

Less than <

Less than

Four candles are Five candles

Five candles are "one" more than Four candles.

Learning Point:

More than and less than show place value of numbers.

Example: so 5 comes after 4 in place value.

More than >

>

More than

Three students are Two students

Directions: Write < , > or = in the blank space.

Note: The first two are done for you.

a) 2 < 3 b) 4 = 4 c) 5 ____ 7 d) 9 ____ 8

e) 6 ____ 4 f) 3 ____ 3 g) 8 ____ 4 h) 7 ____ 9

i) 9 ____ 9 j) 1 ____ 4

Directions: Write a "Less than" (<), "More than" (>) or "Equal to" (=) sign in the blank spaces provided below:

Note: The first one is done for you.

1. One banana < two bananas
2. Three students _____ three students.
3. Four buses _____ five buses.
4. Eight books _____ seven books.
5. Nine teachers _____ ten teachers.
6. Six nurses _____ two nurses.
7. Four oranges _____ eight oranges.
8. Three classes _____ two classes
9. Five dish pans _____ three dish pans.
10. Seven Obama lappas _____ seven Obama lappas.

MODULE A

Lesson 4: Numeric Symbols and Quantities 10 to 20

Learning Points:

- When you count from left to right, the number gets bigger and bigger.

For example: to start counting from 1, we get: 1, 2, 3, 4, 5 or as shown below.

Let's look at the numbers again:

0 1 2 3 4 5 6 7 8 9

Learning Point:

When Zero (0), one (1), or two (2), etc is placed after a number the value of that number becomes bigger. Example:1 **0** = 10

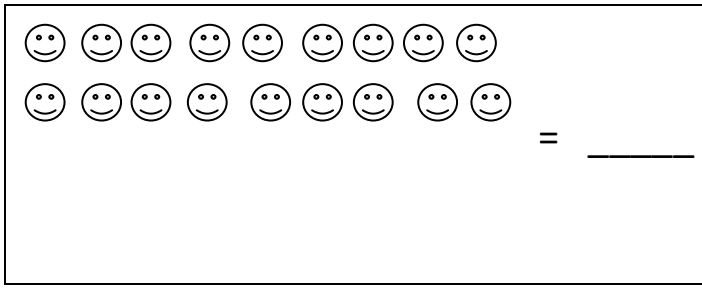
Example:

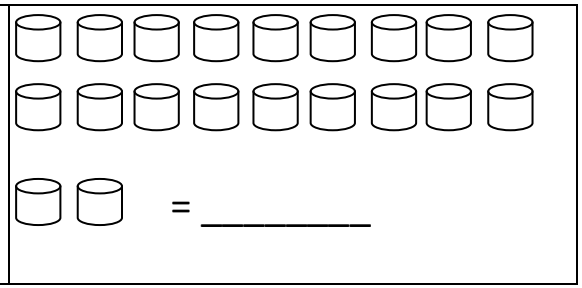
Write number 1 and place 0 after it as 1 **0,** you get ten.

Directions: **The ones have been put in on the second row; continue with the 2s to make the twenties:**

Numbers →	0	1	2	3	4	5	6	7	8	9
Put in 1 ↓	10	11	12	13	14	15	16	17	18	19
Put in 2	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9

Directions: Write the total number of objects in the blank space:





Directions: Fill in the chart provided below:

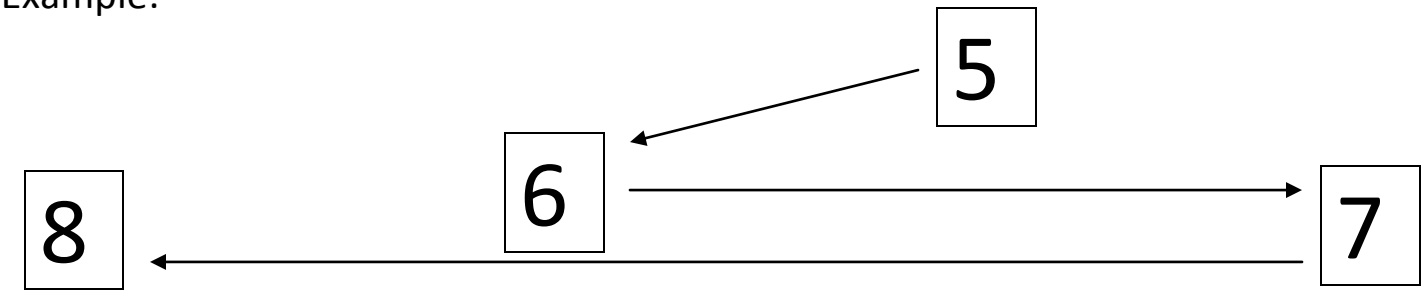
Key → / N0s. ↓	0	1	2	3	4	5	6	7	8	9
1 →	10	11	12	13	14	15	16	17	18	19
2										
3										
4										
5										

MODULE A

Lesson 5: Practice Ordering & Comparing Place Values from 0 to 20

Directions: Draw arrows to put these numbers in order:

a) Example:



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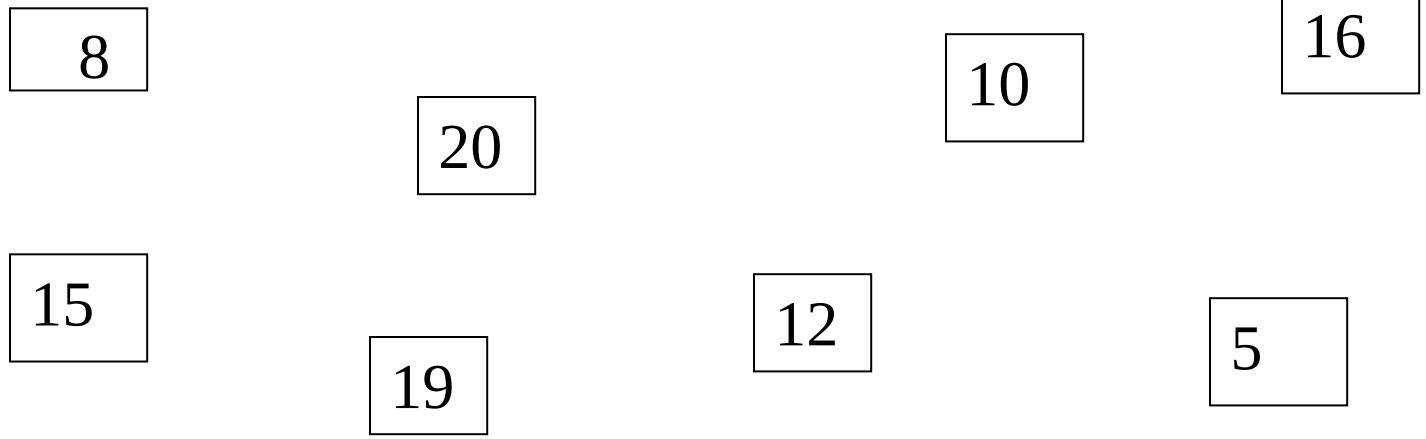
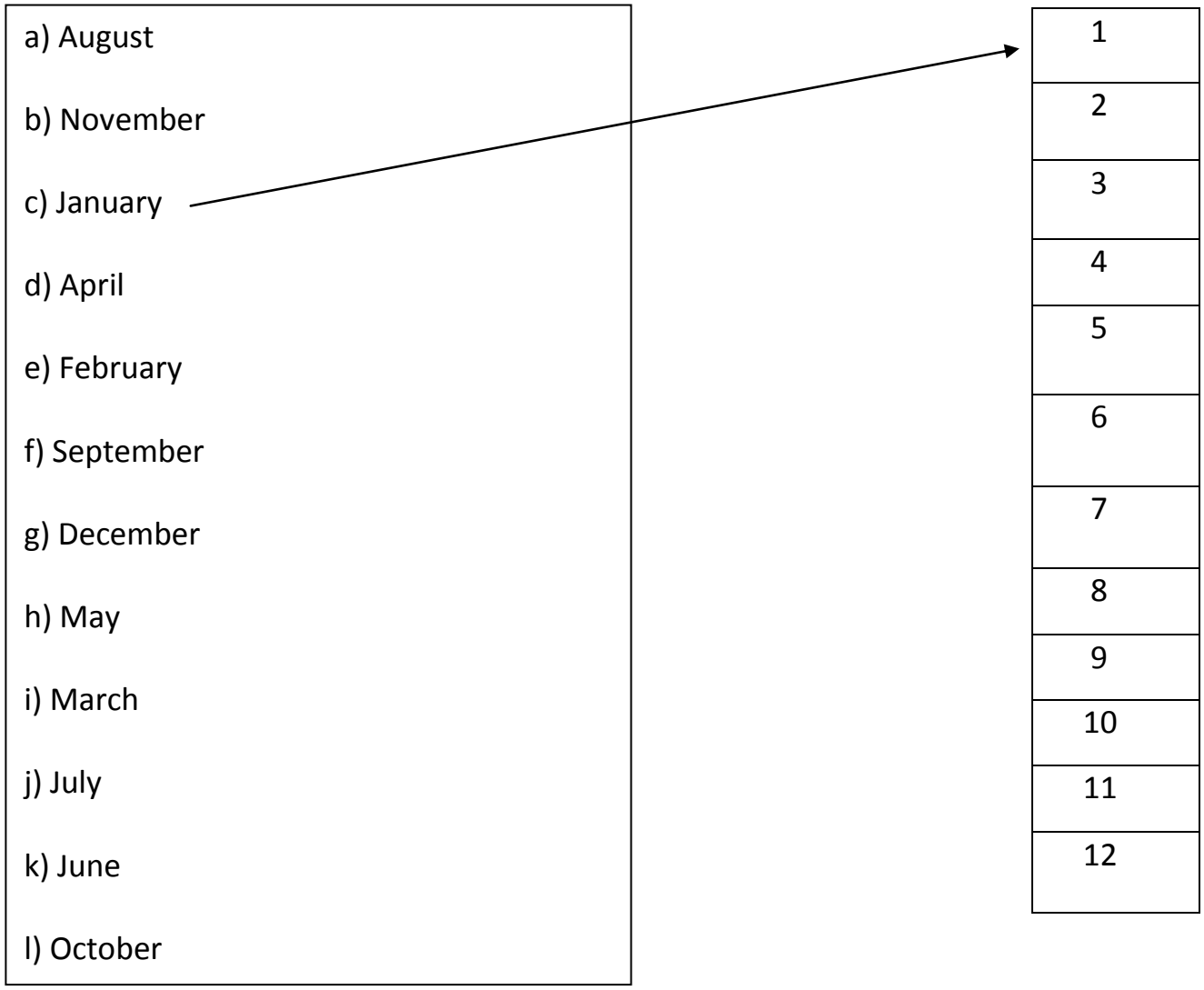
b)



Directions: Put the months in order: Note: The first one is done for you.



Directions: Write the answer for each question below.

1. December is which month of the year? _____
2. How many months are there from January to July? _____
3. April has 30 days, and February has _____days?

Number Comparison

Directions: Write "equal to (=)", "more than (>)", or "Less than (<)" in the blank spaces provided: Note: The first one is done for you.

7 stones < 17 stones

4 girls ___ 2 girls

13 books ___ 14 books

10 dollars ___ 20 dollars

10 dollars ___ 20 dollars

16 boys ___ 8 boys

MODULE A

Lesson 6: Even Numbers

Learning Point:

- Even numbers are numbers that can be divided by 2 without remainder**.** Example: 2 4 6 8 10.
  2 can divide 2, as well 4, 6, 8, 10 without remainder.

- The number 2 is an even number.

- After 2, skip one number to continue to find other even numbers.
  Example: 2 4 6 8 10

Directions: GAME CARD - Play this game below in only two minutes:

Beginning with 2, mark X on all of the even numbers from 1 to 20. The first one is done for you.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

Directions: Write the even numbers you have marked with X in the table below:

See first example

2				

The number 2 is one of the even numbers marked X in the table on the page before this.

MODULE A

Lesson 7: Counting Money up to 20; Practice with Ordering and Comparing

Learning Points:

- Money is important to all of us.
- Money is what we use to pay for something we want and for work that someone does for another person.

Directions: Write the number of each Liberian dollar note below:

Note: The first one is done for you.

5LD or Five Liberian Dollars

_____

_____

_____

_____

Directions: Write the value of each dollar note in order from small to big number.

1) _____ 2) _____ 3) _____ 4) _____ 5) _____

Directions: Write the total of each set of money below.

a) $5 , $10, $5 = _____

b) $10 , $10 = _____

c) $5, $5 = _____

d) $10, $5 = _____

Directions: Write the answer of each question below:

1. **Judy had $180 LD. Among the money she had the following bills as listed below. How many $20 LD does she have?**

   $5LD ---------- 10 bills

   $10 LD----------5 bills

   $20 LD----------?_____

2. **Judy has bills of $5 and $10. She has a total of $110.**

If we know she has 10 bills of $5, how many bills of $10 does she have to get the total of $110?

_____

These are pictures of money for further calculation. $5 and $10 pieces

MODULE A

Lesson 8: Number Value: Concept of Addition

Definition: **Adding to something means making it bigger.**

Learning Point:

- Adding two or more numbers together makes a bigger number.
  The sign for addition is **+**
  The sign for equal is **=**

Directions: Add the following one digit numbers:

1) 4 + 4 = _____ 2) 8 + 9 = _____ 3) 5 + 3 = _____

4) 6 + 3 = ☐

5) 4 + 1 = ☐

6) 7 + 5 = ☐

Directions: Add the following one digit numbers:

7) $\begin{array}{r} 1 \\ +\ 6 \\ \hline = \square \end{array}$

8) $\begin{array}{r} 3 \\ +\ 9 \\ \hline = \square \end{array}$

9) $\begin{array}{r} 1 \\ +\ 1 \\ \hline = \square \end{array}$

10) 5 + 3 + 2 = _____

11) 1 + 4 + 6 + 3 = _____

Learning Points:

- We have looked at adding single numbers. These are the numbers between 0 and 9.
- **To add means "to put together"**

3

Addition Exercise

Directions: Add these two digit sums:

Note: the first one is done for you.

23 + 42 68	63 + 26	42 + 57	33 + 56
41 + 53	23 + 76	25 + 41	
50 + 27	73 + 25	36 + 43	

MODULE A

Lesson 9: Concept of Subtraction (Take Away)

Definition: **Taking away from something means making it smaller.**

Learning Point:

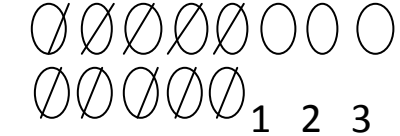
- Subtraction means " **TAKE AWAY"**

  The sign for Subtraction is **-**

Example:

Here is a one digit sum

$$\begin{array}{r} 8 \\ -\,5 \\ \hline \mathbf{3} \end{array}$$



Directions: Subtract the smaller number from the bigger number:

Note: The first one is done for you.

6 - 4 2	7 - 5	6 - 2	8 - 3

Directions: Subtract the smaller number from the bigger number:

9 - 6	2 - 1	7 - 4	5 - 2
9 - 0	2 - 1	8 - 7	5 - 2

$$\begin{array}{r} 4 \\ -\ 2 \\ \hline \end{array} \qquad \begin{array}{r} 3 \\ -\ 1 \\ \hline \end{array} \qquad \begin{array}{r} 5 \\ -\ 2 \\ \hline \end{array} \qquad \begin{array}{r} 3 \\ -\ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -\ 6 \\ \hline \end{array} \qquad \begin{array}{r} 9 \\ -\ 6 \\ \hline \end{array} \qquad \begin{array}{r} 7 \\ -\ 3 \\ \hline \end{array}$$

MODULE A

Lesson 10: The Numbers from 20 to 100 and 10's

Learning Points:

- Counting numbers helps to know how many or much of item, people or money are there.

Directions: Fill in the chart with the right counting numbers:

Note: The first two lines are done for you.

0	1	2	3	4	5	6	7	8	9	10
1	11	12	13	14	15	16	17	18	19	20
2										
3										
4										
5										
6										
7										
8										
9										100

Directions: Write the answer of the following questions:

Note: The first one is done for you.

a) 21 is **20 and 1.**

b) 34 is 30 and _____.

c) 69 is _____and 9.

d) 47 is 40 and _____.

e) 12 is _____ and 2.

f) The number that comes after 42, is ____.

g) Three numbers that come after 20 are _____, 22, _____.

i) 71 is _____and 1.

j) 89 is 80 and _____.

k) 99 is 90 and _____.

l) 56 is 50 and _____.

m) 17 is 10 and _____.

n) 20 and 8 is _____.

o) 60 and 5 is _____.

MODULE A

Lesson 11: Getting to Know How Much is 20 to 100 – Estimation of a Price.

Directions: Circle whose guess is closest to the actual amount without being more than the actual amount:

Who wins for boiled peanuts? _____

Who wins for rice grain? _____ Who wins for candy? _____

Boiled peanuts 44	Rice grain 80	Candy 25
Fanta 35	Fanta 75	Fanta 46
Saah 70	Saah 90	Saah 22
Kika 40	Kika 95	Kika 30

Every day, Judy sells several things in the market such as books, calculators, back bags, notepads and markers.

Directions: Write the answer for each problem below:

1. **Question:** If Judy sold 5 books per day, how many did she sell in two days?

_____

2. **Question:** If she sold one of each item (book, calculator, back bag, notepad and marker), how many things in total did she sell by the end of the day?

_____

MODULE A

Lesson 12: Practice Sequencing the Numbers from 20 – 100's

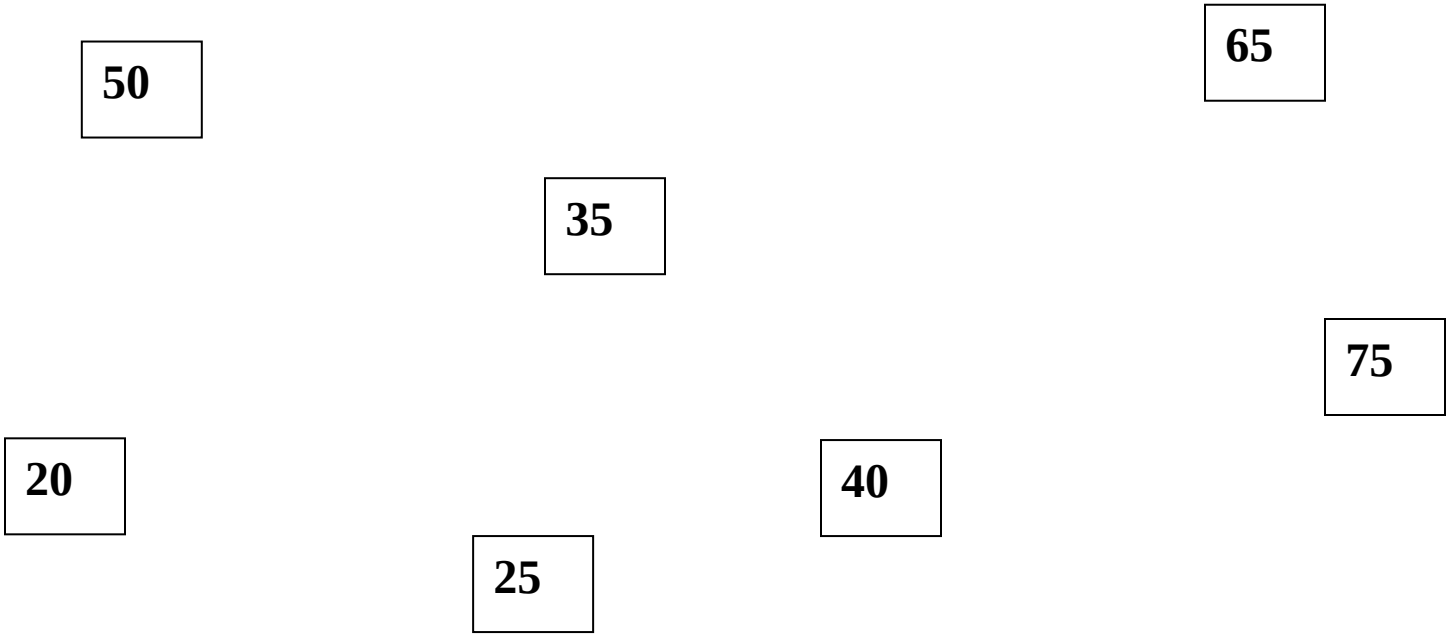
Learning Point:

- Sequencing numbers is one way to help you know the value of each. Example: 3 4 5 6 and so on.
- In the example, the number 3 comes before 4, meaning 3 is smaller than 4; 4 comes before 5, and 4 is smaller than 5 and so on.

Directions: Put the following numbers in order from smaller to bigger:

50 72 46 10 87 40 100 33 21 32

Directions: Draw an arrow to connect the numbers below from smallest to biggest:

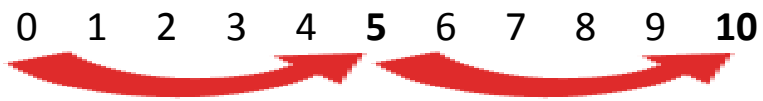


MODULE A

Lesson 13: Skip Counting by 5's and 10's

Learning Points:

- Counting in fives is a skill which makes counting quicker. It is a similar skill to counting in twos. It means skipping over four numbers.



Directions: Mark X on every fifth number:

Note: The first one is done for you.

1	2	3	4	~~5~~	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

Directions: Counting by skipping: Fill in the table:

Note: The first one is done for you.

Skip count by 5	**5**	**10**	**15**	**20**	**25**
Skip count by 10					
Skip count by 20					
Skip count by 30					

MODULE A

Lesson 14: Counting Money by Skip Counting

Learning Point:

- Counting by skip counting is very useful in counting money. It helps you to count fast.

Liberian money is made up of mostly bank notes that are widely used throughout the country.

The banknotes include $5; $10; $20; $50 and $100**.**

Directions: Do this exercise:

Judy has some dry goods including slippers, lappas, grease, watches and used cloths.
She sold for five days and earned the following amount:

day 1 - $80
day 2 – $10
day 3 - $25
day 4 – $40
day 5 – $35

How much did she earn in 5 days? (Check one)

180	190	175

Directions: Fill in the blank spaces in the table below:

By skip counting, how many of each note is found in the following money?
Note: The first one is done for you.

1.

How many of each dollar note do you find in $80?		
Dollar note	**Skip count**	**Answer**
20's	20, 40, 60, 80	4
10's		
5's		

2.

How many of each dollar note do you find in $100?		
Dollar note	**Skip count**	**Answer**
20's		
10's		
5's		

3.

How many of each dollar note do you find in $90?		
Dollar note	**Skip count**	**Answer**
10's		
5's		

Directions: Fill in the table by skip counting:

Note: The first one is done for you.

Skip count by 10 to get 80	**10**	**20**	**30**	**40**	**50**	**60**	**80**		
Skip count by 5 to get 45									
Skip count by 20 to get 180									
Skip count by 10 to get 90									

Directions: Write the answer of this story problem:

Skip counting by addition.

a) If Judy had 16 pieces of $5 notes, how many pieces of $10 notes did she need to get a full amount of $110?

MODULE A

Lesson 15: Introduction to Telling Time, the Clock and Hours

Learning Points:

- There are 24 hours in a day. These are split into two groups of 12 hours.
- The first 12 hours are from midnight to midday.
- The second 12 hours are from midday to midnight.

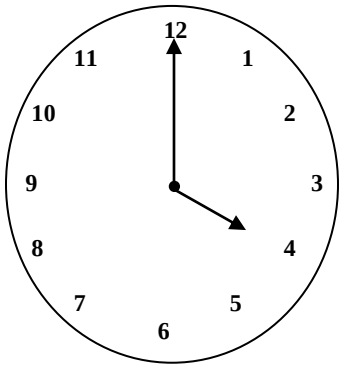
Directions: Do the following problems:

1. What time is it on the clock? _____

Directions: Show the "short hand" and "long hand" on the clocks. Write the time next to each clock:

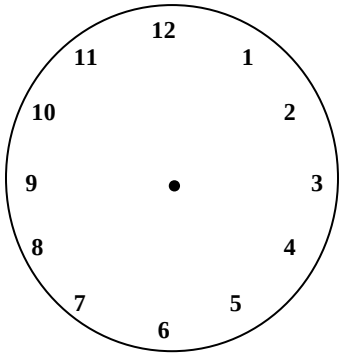
Note: The first one is done for you.

1. The long hand is on 12, while the short hand is on 4.

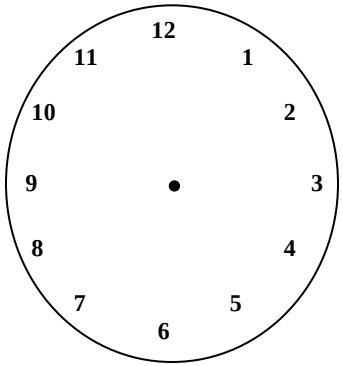


The time is 4.00

2. The long hand is on 12, while the short hand is on 8.

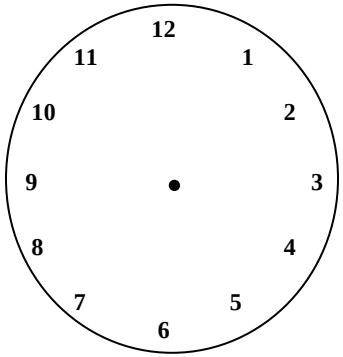


3. The long hand is on 12, while the short hand is on 10.



_____

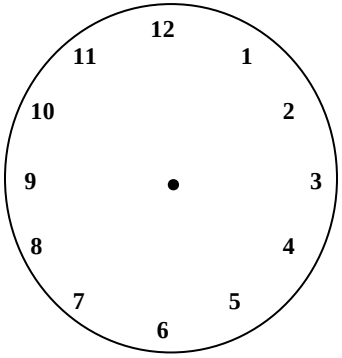
4. The long hand is on 12, while the short hand is on 5.



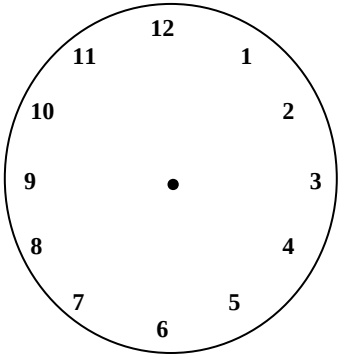
_____

Directions: Draw the short hand and long hand to show the time.

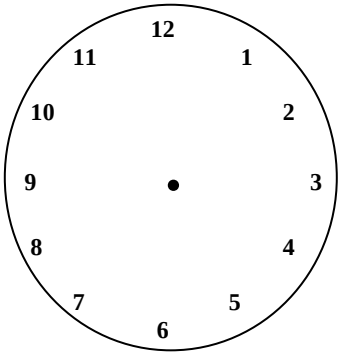
5. The time is 4 o'clock



6. The time is 12 o'clock.



7. The time is 5:30.

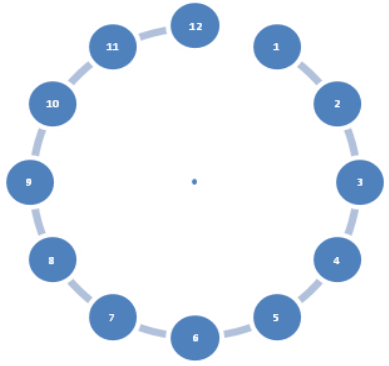


MODULE A

Lesson 16: Telling Time Using Skip Counting to Understand Minutes

Learning Points:

- The short hand points to the hour.
- The long hand points to the minutes.
- There are 60 minutes in one hour.
- The long hand goes around the clock once every hour.
- The clock with two hands is called the Analog clock and it uses the numbers from 1 – 12. We use this clock most often.



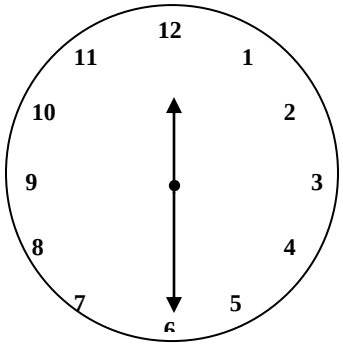
Learning Points:

- Each Number from 1 – 12 on the clock represents 5 minutes.
- We usually tell the minutes in 5s, that is why skip counting in 5s is helpful

Skip Counting by 5s to tell the time

Directions: Fill in the blank spaces and write the appropriate time after skip counting:

Note: The first one is done for you.



1. **The long hand is on 6 and the short hand is on 12. Skip count by 5s to get the minutes of the long hand.** Note: the first one is done for you.

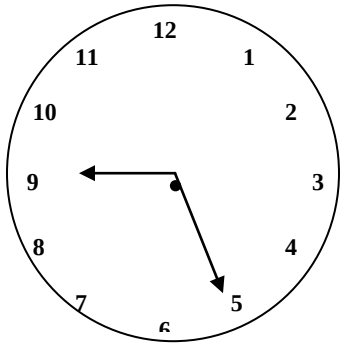
   Answer: From 12 ⟶ 1 2 3 4 5 6
   Count ⟶ 5 10 15 20 25 30

   The time is: **12: 30 - This means 30 minutes after 12 o'clock.**

2. The short hand is on 9 and the long hand is on 5

a) Skip count by 5s to get the minutes of the long hand.

b) What is exactly the time?



Answer: From 12 ⟶ 1 2 3 4 5

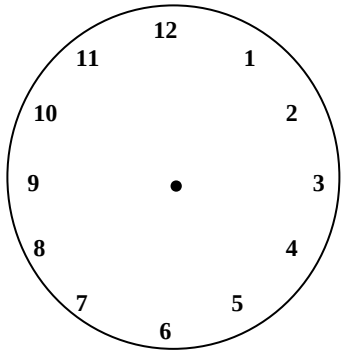
Count: ⟶ __ __ __ __ __

The Time is:

3. The short hand is on 10 and the long hand is on 9

a) Skip count by 5s to get the minutes of the long hand

b) What is exactly the time?

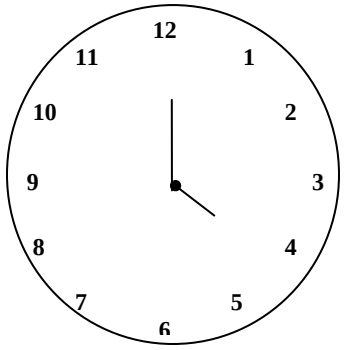


Answer: From 12 ⟶ 1 2 3 4 5 6 7 8 9

Count: __ __ __ __ __ __ __ __ __

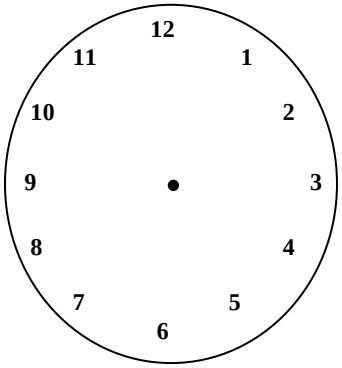
The Time is:

Directions: Use the short hand and the long hand to tell the time on the clock:



What is the time? _____

Directions: Draw the long hand and the short hand on the clock to show the time below:



The time is 9:45 PM

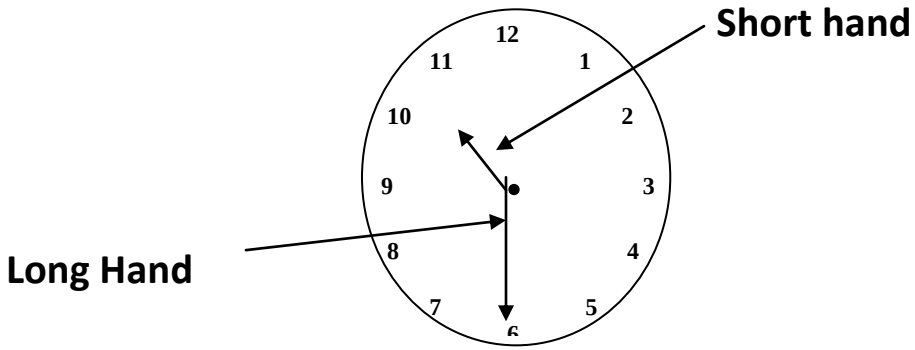
MODULE A

Lesson 17: Practice Telling Time, Writing Time

Learning Points:

- The short hand in the clock shows the hour.
- The long hand shows the minute.

Sample of a Clock



AM	PM
The first 12 before Midnight, we call these hours "**am**"	The first 12 after Midday, we call these hours "**pm"**.
Examples:	
12 0'clock Midnight = 12.00 am	12 0'clock Midday = 12.00 pm
9 0'clock Morning = 9.00 am	4 0'clock Afternoon/Evening = 4.00pm
6 0'clock Morning = 6.00 am	9 0'clock Night = 9.00 pm

Directions: Look at the schedule in the box to answer the problem below:

- School regular classes start at 8.00 am
- Breakfast is 8.00 am
- Alternative basic education class in Boniken starts at 6.00 pm
- Girls' club meeting at Borkeza is at 12.00pm (midday)
- Learner Krubo Zaza goes to the farm at 6.00 am and comes at 5.00 pm in evening to get ready for class session at 8:30 pm
- 12.00am (midnight) is the beginning of a new day

Directions: Mark X in the box of the correct answer.

1. The beginning of a NEW day is:

12.00 pm ☐

12.00 am ☐

2. Class in Boniken starts at:

6.00 am ☐

6.00 pm ☐

3. Borkeza Girls' Club meeting is at:

12.00 pm ☐

12.00 am ☐

4. The first 12 after Midday, is called:

am ☐

pm ☐

MODULE A

Lesson 18: Making a Personal Map of How Time is Spent in a Day

Learning Points:

- We know that there are 24 hours in a day. These are split into two groups of 12 hours.
- The first 12 hours are from midnight to midday.
- The second 12 hours are from midday to midnight.
- The clock with two hands is called the Analog clock and it uses the numbers from 1 - 12. We use this clock most often.

Directions: In a workplace the working hours might be as follows:

1. 9.00 am	Start work
2. 11.00 am	Tea break
3. 1.00 pm	Lunch
4. 2.00 pm	Back to work
5. 5.00 pm	Finish normal shift
6. 8.00 pm	Finish late shift

Directions: Draw an arrow from the phrase mentioned in Column A to the time in Column B that best answers the question:

Note: The first one is done for you.

1. Tea break	☐	8.00 am
2. Lunch	☐	11.00 am
3. Start work	☐	9.00 am
4. Finish late shift	☐	2.00 pm
5. Back to work	☐	1.00 pm
6. Finish normal shift	☐	5.00 pm

Directions: Fill in the table to match with your personal time of daily activities. Put in the time:

Prepare the children for school	
Children leave for school	
Go to the market to buy food	
Go to work	
Get ready for class	
Club meeting	
Community meeting	
Cleaning the house	
Study lessons	

Directions: Write the activities in your day:

AM		**PM**	
Time/hours	**Activities**	**Time/Hours**	**Activities**
12.00 (00.00 in 24hr clock)		12.00	
1.00		1.00 (13.00 in 24hr clock)	
2.00		2.00 (14.00 in 24hr clock)	
3.00		3.00 (15.00 in 24hr clock)	
4.00		4.00 (16.00 in 24hr clock)	
5.00		5.00 (17.00 in 24hr clock)	
6.00		6.00 (18.00 in 24hr clock)	
7.00		7.00 (19.00 in 24hr clock)	
8.00		8.00 (20.00 in 24hr clock)	
9.00		9.00 (21.00 in 24hr clock)	
10.00		10.00 (22.00 in 24hr clock)	
11.00		11.00 (23.00 in 24hr clock)	

Some clocks go for a 24 hour basis.

Time	in 24hr clock	Time	in 24hr clock
12.00 am (midnight)	00.00	12.00 pm (noon)	12:00
1.00 am	1:00	1.00	13:00
2.00	2.00	2.00	14:00
3.00	3.00	3.00	15:00
4.00	4.00	4.00	16:00
5.00	5.00	5.00	17:00
6.00	6.00	6.00	18:00
7.00	7.00	7.00	19:00
8.00	8.00	8.00	20:00
9.00	9.00	9.00	21:00
10.00	10.00	10.00	22:00
11.00	11.00	11.00	23:00

Time	in 24hr clock	Time	in 24hr clock
12.00 am (midnight)		12.00 pm (noon)	
1.00 am		11:00 am	
7:00 pm		11:00 pm	
3.00 am		3.00 am	
4.00 pm		5:00 pm	
10:00 pm		7:00 pm	
6.00 am		6.00 am	
2:00 pm		10:00 pm	
8.00 pm		2:00 am	
9.00 am		9.00 pm	
10.00 pm		3:00 pm	
1:00 pm		11.00 am	

Directions: Write down these times in am or pm:

Note: The first one is done for you.

1. 6 o'clock in the morning **6.00am**
2. 9 o'clock in the morning _____
3. 1 o'clock lunch time _____
4. 4 o'clock in the afternoon _____
5. 5 o'clock in the evening _____
6. 8 o'clock at night _____
7. 10 o'clock at night _____

MODULE A

Lesson 19: Reading a Calendar, Reading Dates

Learning Points:

- A calendar is divided into days, weeks and months to make a whole year.
- 7 days = 1 week
- 4 weeks = 1 month
- 12 months = 1 year

There is a short rhyme which reminds us how many days are in each month:

Thirty days have September, April, June and November

All the rest have thirty-one

Except for February alone, this has only twenty-eight

Directions: Using this rhyme, fill in how many days are in each month:

Note: The first one is done for you.

No	Month	Number of Days
1	January	**31**
2	February	
3	March	
4	April	
5	May	
6	June	
7	July	
8	August	
9	September	
10	October	
11	November	
12	December	

Directions: Write these dates in numbers:

For Example:

July 26, 1847 Liberia gained her independence.

Can be written as: 26 / 07 / 1847

1. I worked in the company from 16 March 1998 to 10 June 2000.
   a) I worked in the company from

      _____/_____/_____ to _____/_____/_____

2. Today's date is_____or_____/_____/_____

MODULE A

Lesson 20: Using a Calendar, Writing Dates, Adding and Subtracting Days

Learning Points:

- Writing dates on a calendar helps keep us informed about our daily activities.

Directions: Mark X to highlight the following dates on the calendar. Draw an arrow and label the day(s) you mark:

Note: The first one is done for you.

1. May 14, Liberia Unification Day.
2. Our NFE class dates are Mon, Tues, Wed.
3. Girls enrolment campaign is 6th May.
4. Every second Saturday is Culture of Reading Competition day.

May:

Sun	Mon	Tue	Wed	Thr	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	~~14~~	~~15~~
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Unification Day

See this sample calendar.

March 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Directions: Use the sample calendar above to prepare a new calendar for April.

April 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat

Write your activities and scheduled dates:

N0.	Major activities for the month	Schedule date(s)
1		
2		
3		
4		
5		

Directions: On the previous page look at your activities and the calendar. Draw a line from the scheduled date on your list, to the day of the calendar on your calendar chart.

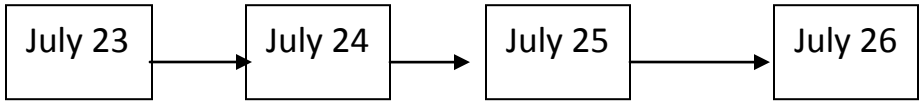
Adding and Subtracting Dates

Directions: Solve the following problems:

Note: The first one is done for you.

1. Today is the 23rd of July. What is the date three days from now? _____

Answer: Starting date is July 23. Move forward 3 days in row.
So we add 3 to 23 and get 26.



Start date: 23 + 1 + 1 + 1 = 26

2. Judy was born on the 19th of June. She is 4 days older than her younger sister. When was her sister born?

3. The culture of reading competition was held in Pleebo ALP School 10 days before May 5, 2010. What date of the month was the competition held? In which month was it held?

4. Seven days before July 26, the school Girls' Social Club meeting will be held. What is the date?

MODULE A

Lesson 21: Experience with Addition Tables and Solving Problems

Learning Point:

- Addition means "To put together"

Example: 3 + 4 = 7; 4 + 3 = 7

- The sum of digits is the same whether it is done in a roll or by lined up.

a) 3 + 4 = **7** ⟶ roll

b)
$$\begin{array}{r} 3 \\ +\ 4 \\ \hline \mathbf{7} \end{array}$$
lined up

Directions: Solve the following problems by re-arranging them. Then add the numbers:

Note: The first one is done for you.

1) $7 + 8 = 8 + \underline{\mathbf{7}} = 15$

2) $4 + 5 = \underline{\quad} + 4 = \underline{\quad}$

3) $2 + 6 = 6 + \underline{\quad} = \underline{\quad}$

4) $\begin{array}{r} 9 \\ +\,7 \\ \hline \end{array} = \begin{array}{r} 7 \\ +\,\square \\ \hline \end{array} =$

5) $\begin{array}{r} 10 \\ +12 \\ \hline \end{array} = \begin{array}{r} 12 \\ +\,\square \\ \hline \end{array} =$

Directions: Fill the addition table provided below:

Example: 2 + 0 = 2; 2 + 1 = 3; 3 + 0 = 3; 3 + 1 = 4; 4 + 0 = 4; 4 + 1 = 5

Note: The first two columns are done for you.

+ → ↑	0	1	2	3	4	5	6	7	8	9
2	2	3								
3	3	4								
4	4	5								

MODULE A

Lesson 22: Addition, Using Money

Learning Point:

- Operation using addition is the same for everything. It is simply "to put things together" to get a larger one. It could be items, numbers, animals, or money.

Directions: Solve these problems below.

1. If you had $10 LD, $20 LD and $50 LD. How much do you have in all?

2. What is the total of the following amount?: $15, $50, $60 and $10? _____

MODULE A

Lesson 23: Experience with Subtraction

Learning Point:

- Subtraction simply means “take-away” and the result is a smaller one.

Directions: Solve these problems:

8	6	5	19	14	9
- 5	- 2	- 2	- 8	- 3	- 4

47	56	69	37	58
- 24	- 25	- 36	- 15	- 28

MODULE A

Lesson 24: Subtraction with Money

Learning Point:

- Subtract is simply to "**Take-away**".

- Subtraction can be used to take away a number or object from a bigger one to a smaller one. Example: Esther has $10 LD. She used $5 LD to buy cold water. How much money does she have left?

  $10 - $5 = $5 or

  $$\begin{array}{r} \$10 \\ - \quad 5 \\ \hline \textbf{= \$ 5} \end{array}$$

Look at the following items and the price for each:

Item	Price
a) Obama lappa	$20
b) Pair of shoes	$15
c) Ghana watch	$10
d) School Uniform	$17
e) Calculator	$12
f) Back bag	$5
g) Cream	$7

Directions: Use the price of each item listed above and answer each question:

1. Judy bought one set of Obama lappa, school uniform and paid $40.00. What is her change?

2. If you bought all of the seven items listed above, and paid $95. What is your balance?

3. Sonie bought a set of items including cream, pair of shoes, Ghana watch and paid a total of $50. How much is her change?

4. You paid $20 to purchase a calculator. How much change do you have?

MODULE A

Lesson 25: Practice with Addition and Subtraction

Learning Point:

- In addition, when two numbers are added, the sum is the same no matter what the order of the number. For example: 6 + 3 = 9 and 3 + 6 = 9.
- In subtraction, the sum is broken down by one of the small numbers to give the other small number. For example: 9 – 6 = 3
- Another way when you have more than 2-digits to subtract and to add is by groupings. You subtract first and add or you add first and then you subtract.

- Example 1)

8 – 5 + 10 = ___

3 + 10 = ___

Example 2)

8 – 5 + 10 = ____

18 – 5 =_____

The answer to both is 13

Directions: Add or subtract to solve these problems below:

a) 8 – 3 = _____

b) 6 + 4 = _____

c) 7 – 4 = _____

d) 5 + 6 – 3 = _____

e) 9 – 7 + 5 = _____

f) 4 + 3 - 2 =_____

g) 10 + 2 – 4 + 3 = _____

h) 20 – 10 + 5 – 2 = _____

Directions: Check the box with the correct answer:

4+8=

a) 4 ☐

b) 12 ☐

c) 14 ☐

d) 8 ☐

MODULE A

Lesson 26: What the Place of the Numbers Tells Us: Place Value of Ones, Tens and Hundreds

Learning Points:

- Place value shows the position of where the digit is in the number, such as ones, tens, hundreds, thousands, etc.

- Example: in 352, the value of 5 is "tens".

Hundreds	Tens	Ones
3	5	2

Directions: Check the box of the right answer:

a) 45 – What is the place of 5 in the number?

Tens ☐ Ones ☐

b) 384 – What is the place of 3 in the number?

Hundreds ☐ Tens ☐ Ones ☐

c) 72 – What is the place of 7 in the number?

Tens ☐ Ones ☐

Directions: Write the number in the correct column below:

Note: The first one is done for you.

Number	Question	Place value of number		
		Hundreds	Tens	Ones
88	Is written as?		80	8
20	Is written as?			
619	Is written as?			
423	Is written as?			
805	Is written as?			

Directions: Place the following numbers into their hundreds, tens and units:

Note: The first two are done for you.

76 = 70 + 6

538 = 500 + 30 + 8

49 = _____ + _____

91 = _____ + _____

284 = _____ + _____ + _____

58 = _____ + _____

62 = _____ + _____

809 = _____ + _____

648 = _____ + _____ + _____

17 = _____ + _____

Directions: Place the following numbers into their hundreds, tens and units:

Note: The first two are done for you.

35 = 30 + 5

120 = 100 + 20 + 0

956 =

314 =

29 =

470 =

706 =

83 =

74 =

527 =

204 =

47 =

END – OF – MODULE A

MODULE B

Lesson 28: 2-Digit Static Addition, Part 1: Place Value

Learning Points:

- Addition is putting together two numbers into a single number.
- The sign for addition is (+)

Directions: Use the addition table to answer each question on the next page:

Example: To get number 8, check the following number pairs in the table as: 0+8; 1+7, etc.

+	0	1	2	3	4	5	6	7	8	9
1	0+1	1+1	2+1	3+1	4+1	5+1	6+1	7+1	8+1	9+1
2	0+2	1+2	2+2	3+2	4+2	5+2	6+2	7+2	8+2	9+2
3	0+3	1+3	2+3	3+3	4+3	5+3	6+3	7+3	8+3	9+3
4	0+4	1+4	2+4	3+4	4+4	5+4	6+4	7+4	8+4	9+4
5	0+5	1+5	2+5	3+5	4+5	5+5	6+5	7+5	8+5	9+5
6	0+6	1+6	2+6	3+6	4+6	5+6	6+6	7+6	8+6	9+6
7	0+7	1+7	2+7	3+7	4+7	5+7	6+7	7+7	8+7	9+7
8	0+8	1+8	2+8	3+8	4+8	5+8	6+8	7+8	8+8	8+9
9	0+9	1+9	2+9	3+9	4+9	5+9	6+9	7+9	9+8	9+9

Directions: What are the numbers you would <u>put together</u> to get the following one digit number? Use the addition chart above:

Note: The first one is done for you.

a) 8 is equal to:	0 + 8	4 + 4	5 + 3	2 + 6	1 + 7
b) 6 is equal to:					
c) 9 is equal to:					
d) 7 is equal to:					
e) 5 is equal to:					
f) 4 is equal to:					

MODULE B

Lesson 29: 2-Digit Static Addition, Part 2: Addition Without Carry Over

Learning Point:

- When adding double-digit numbers, the numbers must stand under each other to give the sum.

Example - Add the following double-digit numbers:

64 + 22 = _____

Then add the numbers →

6	4
+ 2	2
8	6

Directions: Add these numbers:

72 + 11	42 + 7	80 + 15	34 + 5
60 + 7	54 + 35	45 + 54	30 + 31
75 + 40	30 + 31	75 + 20	65 + 31
55 + 40	37 + 31		

MODULE B

Lesson 30: Practicing Vertical Addition – Story Problems (Without Carry Over)

Learning Points:

- In practicing reading and solving word problems, words such as "and, take, add, means to "put together".

Directions: Solve these story problems below:

Note: The first one is done for you.

1) The Binda family has 45 chickens. Their neighbors, the Kollehs, gave 23 chickens to take care of while they were away. How many chickens must the Bindas take care of all together?

The Binda family has 45 chickens. The Kolleh family has 23 chickens. How many chickens are there in total?

Step 1: Bindas' family chickens = 45
Kollehs' family chickens = 23

Step 2: Put the numbers under each other:

The answer →

4	5
+ 2	3
6	8

Step 3: The Bindas family had all together 68 chickens to take care of.

Directions: Look at the sample problem above and solve the following story problems:

2) Fatu and Mamie wanted to buy a bag of oranges. The bag cost $65.00. Fatu had $35 and Mamie had $32. Together, how much did they have to buy the oranges?

_____

3) Korlu went to the medicine store. She had to buy two kinds of medicine. One kind cost $75 and other cost $24. How much money would she need to buy both medicines?

_____

4) Zena wanted to visit her relatives near Gbarnga. She knew that it was 35 kilometers from her village to Gbarnga and then their house was 15 kilometers farther past Gbarnga. How many kilometers will her whole journey be to the relatives' house?

_____

MODULE B

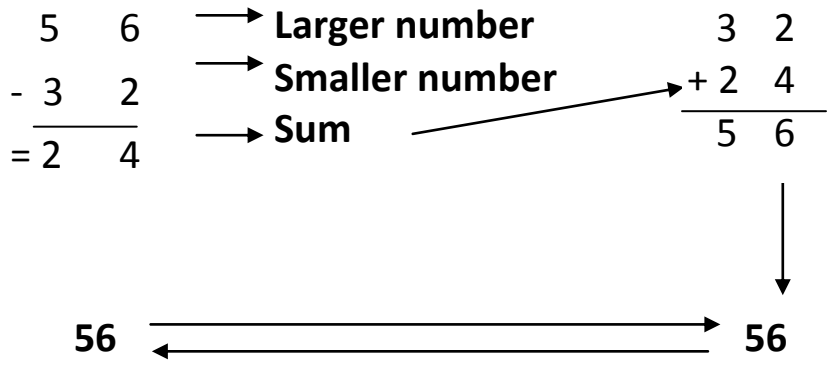
Lesson 31: Subtraction Without Carry-Over (No Borrowing)

Learning Points:

- Subtraction means 'to take away.
- Subtraction reduces the number from big to small.

Example:
Note: The first one is done for you. To see if the answer is correct, add both the number you subtracted and the sum to get the larger number.

1) 56 – 32 =



Check for Correctness:

Step 1: Write the larger number. 5 6
Step 2: Write the smaller number. – 3 2
Step 3: Subtract the number. Start from right to left. **2 4**
Step 4: The answer is **24.**

Directions: Solve these problems below:

8 7	7 9	6 8	9 3	4 8	7 6	8 8
- 5 2	- 5 3	- 2 4	- 2 1	- 2 3	- 4 5	- 3 7

2 3	4 3	5 4	7 4
- 1 2	- 2 1	- 3 2	- 6 3

6 3	8 5	6 4	5 4
- 2 1	- 5 2	- 2 1	- 4 2

MODULE B

Lesson 32: Subtraction Practice With No Borrowing (Story Problems)

Learning Points:

- To subtract numbers, always write the larger number first and then the smaller number.

Directions: Solve these problems below:

Note: The first one is done for you.

1) Menkor saved $88.00, but his brother needed some money so he gave him $66.00. How much did Menkor have left?

Step 1: Menkor's first money at hand: $88
Amount Menkor gave to his brother: $66

Step 2: Subtract the small number from the big number.

$8 8
-$6 6
$2 2 answer

Directions: Use the sample problem above to solve the problems below:

2) In her shop Famatta had 70kg of rice. That day she sold 60kg. How many kg are left in her shop?

3) Faih wanted to buy some new books. They would cost $97. But he only had $36. How much more money does he need to save in order to buy the books.

4) Vicky's family had 85 sheep. They sold 37 sheep to Annita's family. How many sheep do they have left?

5) Binty and her sister Judy went out to buy a pair of Christmas shoes each. The pair of shoes cost $30 each. If Binty had $17 and Judy had $21, how much money did they need to buy the two pairs of shoes?

MODULE B

Lesson 33: Addition With Carrying - Over

Learning Points:

Steps involved in addition with carry over include:

- First add the numbers on your right.
- Second if the sum is more than 10, write last number and carryover the first to the left side.
- The number you carry is added to the number to give the total sum. Write the whole sum. Make sure the numbers are lined up under each other.

Example:
Let's look at carrying over with a 2 digit sum first.

Tens	Ones
^{1} 5	8
+ 2	4
8	2

(4 + 8 = 12. We write 2 and carry the one to the left.)

Directions: Add these two digit sums:

Note: The first one is done for you.

^{1} **4 7**	5 6	2 5	7 3	6 5	3 4
+ 3 4	+ 3 6	+ 2 9	+ 1 9	+ 2 8	+ 4 7
8 1					

Directions: Add these numbers:

3 5	2 4	2 7	5 8
+ 2 6	+ 3 7	+ 2 8	+ 1 2

6 5	4 6	6 5
+ 1 5	+ 3 8	+ 2 4

4 2 6	7 8 9
+ 3 4 1	+ 4 7 2

MODULE B

Lesson 35: Subtraction With Carry-Over

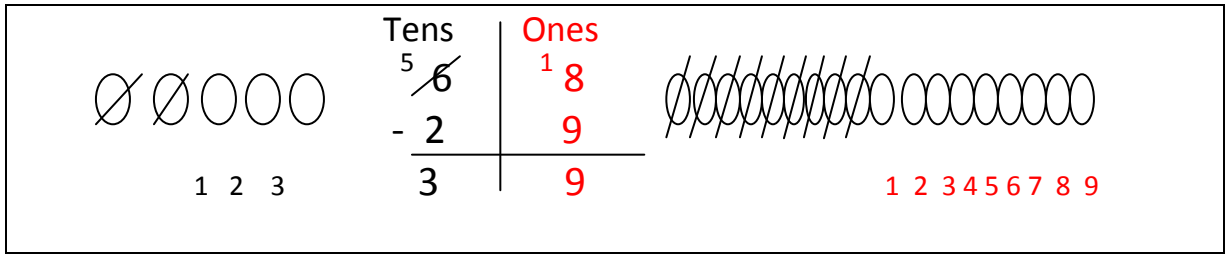
Learning Points:

- When you subtract by borrowing one do the following:
- Subtract one from the tens place and carry to the ones place.
- The one that is subtracted is ten and so it increases the ones by ten
- Then subtract the number. See example below.

Borrowing One

Here is an example to show you how and when this is done:

$$\begin{array}{r} 68 \\ -\,29 \\ \hline \end{array}$$



In the subtraction above, 68 is bigger than 29. But when you do the subtraction with the numbers lined up vertically, you cannot subtract 9 from 8. Therefore you must first borrow 1 from 6. The 1 that you borrow becomes 10. The 10 + 8 = 18. Now you can take away 9 from 18 which equals 9. You earlier borrowed 1 from 6. So you have 5 – 2 = 3. Check above for the summary. The answer is 68 – 29 = 39.

Directions: Subtract to solve the following problems:

Note: The first one is done for you.

4 7 **- 2 4** **2 3**	5 2 - 2 5	6 9 - 3 6	3 3 - 1 5
5 2 - 2 8	7 1 - 5 9	8 5 - 4 8	
8 6 - 4 7	5 5 - 3 8	9 8 - 7 9	6 4 - 3 7

MODULE B

Lesson 36: Practice Subtraction with Borrowing (Story Problems)

Learning points:

- Solve subtraction with borrowing using story problems

Directions: Solve these:

Note: The first one is done for you.

1) Watta wants to buy a gift for her friend. The gift cost $45. Watta has $37. How much more money does she need?

Step 1: Gather information - $45 = cost of gift
$37 = amount with Watta

Step 2: Set up the problem.

$$\begin{array}{r} \$\,4\,5 \\ -\,\$\,3\,7 \\ \hline \$\,0\,8 \end{array}$$

The answer is equal to $8. So Watta will need $8 more to buy her friend a gift.

Directions: Carefully read and solve the problems below:

2) Garmai is the only person that sells fish in her village. She had 85 pieces of fish to sell. If she sold 39 pieces of fish, how many pieces would she have left?

_____

4) Fallah's goal is to make $95 each day. He made $58 yesterday. How much more did he have to make to meet his goal?

_____

5) To get to her mother's house in Harper, Miatta must travel 93 miles. On the first day she traveled 55 miles. How far must she travel on the second day?

_____

MODULE B

Lesson 37: Practice Adding and Subtracting by Buying and Selling

Learning Points:

- Addition means “to put together”
- Subtraction means “to take away”

Directions: Solve these addition and subtraction problems:

Note: The first one is done for you on the next page.

1) Judy, James and her Auntie went to Waterside to buy Christmas clothes. They chose Obama lappa to buy which cost $98 for a roll. Judy had $30, James had $37, and Auntie had $18. How much more money did they need to buy the cloth for all three of them?

Step 1: the roll of clothes cost = $98

Judy's money = $30
James =$37
Auntie =$18

Step 2: Add the money for the three people

$ ^{1} 3 0
$ 3 7
+ $ 1 8
$ 8 5

Step 3: Subtract the total money all three people carried to the market to buy the cloth.

Cost of cloth = $ 9 8
Judy & others sum = - $ 8 5
Answer = $ 1 3

Judy and her family will need $13 more to complete the payment of their lappa.

Directions: Use the sample problem above and solve the problems below:

2) Betty, Loupu and Konah decided to buy a bill of children clothes to sell for the season. The used clothes bill cost $98. Betty had $20, Loupu had $17 and Konah had $14. How much more money did they need to buy the bill?

_____

3) The football teams of Konia and Borkeza Public Schools agreed to have a friendly match in Zorzor. With a transport truck, the driver charged them to pay $275 for the round trip. The both teams were happy and without asking each other paid some money to the driver. Konia paid $178, while Borkeza paid $214. How much money would they get back if they realized each other's payment?

_____

MODULE B

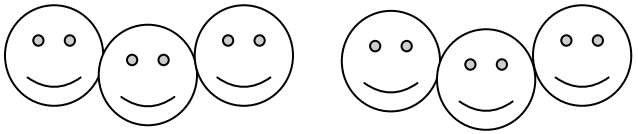
Lesson 38: Introduction to the Concept of Multiplication

Learning Points:

- Multiplication is a special repeated addition and it is represented mathematically with the sign **X**

Example:

1.



3 students 3 students → 3 taken 2 times → 3 X 2 = 6

Also 3 + 3 = 6 or
2+2+2 = 6

Directions: Solve these multiplication problems. Write the answer in each box below:

1) $4 \times 3 = \square$

2) $5 \times 3 = \square$

3) $2 \times 6 = \square$

4) $7 \times 3 = \square$

Directions: Solve these multiplication problems. Write the answer in each box below:

5) 3 X 3 = ☐

6) 8 X 2 = ☐

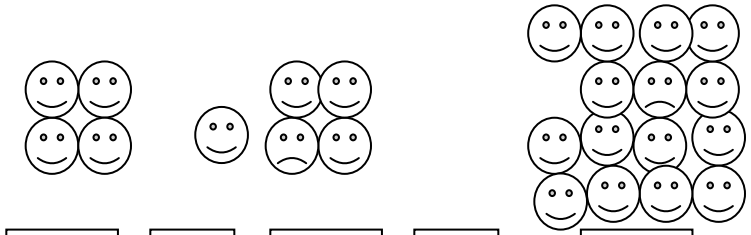
7) 3 X 9 = ☐

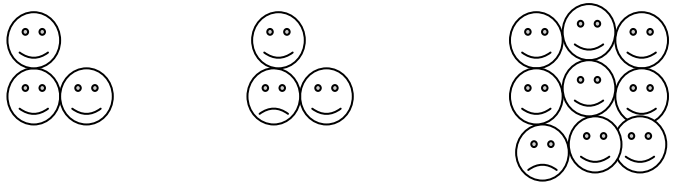
8) 4 X 8 = ☐

9) 3 X 8 = ☐

Directions: Multiply and write the answer in the box below:

10) 2 X 5 = ☐

11)  ☐ X ☐ = ☐

12)  ☐ X ☐ = ☐

MODULE B

Lesson 39: What Multiplication Means and Building the Multiplication Chart

Learning Points:

- Multiplication is termed as repeated addition. Example: 3 x 2 = 6 or 3 + 3 = 6 or 2 + 2 + 2 = 6.
- 3 is being repeated 2 times to get 6, while 2 is repeated 3 times to get 6.

Directions: Fill the multiplication chart below:

Note: The first two lines are done for you.

Multiplication Chart											
X	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2											
3											
4											
5											
6											

Directions: Fill in the missing numbers:

Multiplication Chart											
X	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
0	0										0
1		1								9	
2			4						16		
3				9				21			
4					16		24				
5						25					
6					24		36				
7				21				49			
8			16						72		
9		9								81	

Multiplication practice game – using the chart

Directions: Study the multiplication chart below in order to complete the questions after the chart.

Multiplication Chart											
X	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

Directions: Use the horizontal and the vertical columns of the multiplication chart to circle the correct answer of following problems below:

2 X 2 = 4 5 X 6 = 30 9 X 8 = 72 6 X 6 = 36 5 X 5 = 25 8 X 3 = 24

7 X 6 = 42 4 X 7 = 28 4 X 5 = 20 7 X 7 = 49

MODULE B

Lesson 41: More about the Chart and Patterns

Learning Points:

- Patterns and the multiplication chart help show how numbers are linked to give a specific result or answer.
  Example: To get 35, you multiply 7 by 5 (7x5=35). In the chart, you connect 7 and 5 or 5 and 7. See the chart below.

Directions: Solve the problems on the next page:

Note: The first one is done for you.

Directions: The numbers below are answers to 2 digit numbers when multiplied. Find and circle each number on the multiplication chart. Then draw an arrow to show the 2 numbers for which the number you circled is a product. The first number (35) is done for you.

35, 48, 17, 18, 63, 25, 32, 16, 20, 10, 49, 72, 90, 14, 27

Multiplication Chart											
X	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	**(35)**	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	**(35)**	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

What two numbers when multiplied will give you the following answer?

a)	35	=	5 x 7; 7 x 5
b)	42	=	
c)	63	=	
d)	81	=	
e)	48	=	
f)	14	=	
g)	10	=	
h)	72	=	
i)	36	=	
j)	27	=	

Directions: Use the chart above to answer the following questions. In how many boxes do you find the following numbers on the chart?

Note: The first one is done for you:

a) 35 can be found on **two (2) spaces** on the chart: 5X7; 7X5 (see the arrows on the chart)

a)	35	two (2) boxes	5X7; 7X5	i)	20
b)	48			j)	10
c)	17			k)	49
d)	18			l)	72
e)	63			m)	90
f)	25			n)	14
g)	32			o)	27
h)	16				

MODULE B

Lesson 42: Multiplication Story Problem

Learning Points:

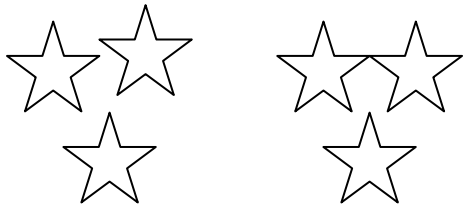
- Multiplication is a quick way of adding the same number. In other words, it is a repeated addition.
- Example: 2 + 2 + 2 = 6 can be multiplied as 2 x 3 = 6

Directions: Solve these:

Note: The first is done for you.

Write the number for the set of objects below:

1)



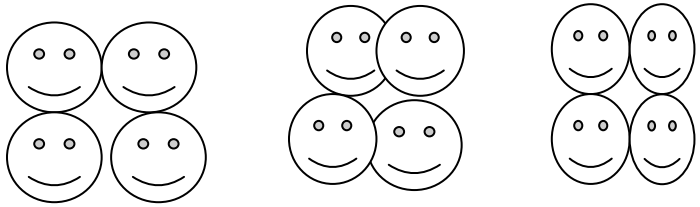
3 ___ 3 ___

What two numbers when multiplied give the total number of objects?

3 x 2 = 6 or

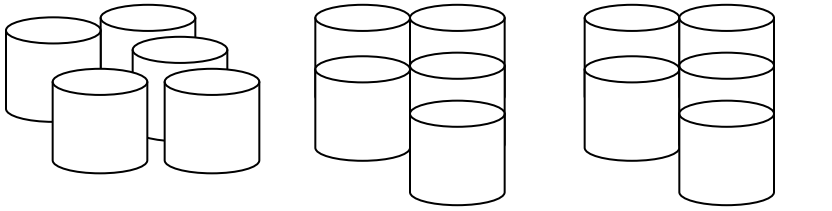
2 x 3 = 6

Answer: The numbers are 3 x 2 = 6 or 2 x 3 = 6.

2) 

What two numbers can be multiplied to give the total number of objects?

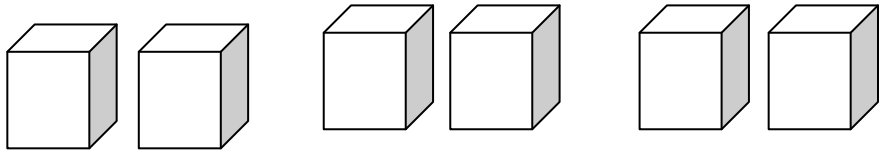
Directions: Write the number of objects below:

3) 

What two numbers can be multiplied to give the total of the objects?

_____ _____ _____

Directions: Write the number of objects below:

4)  Equal to

_____ _____ _____

Story Problems

Directions: Solve the below multiplication word problems:

1. If someone went to church 4 times each day, how many times would they go in 7 days?

_____

2. The doctor tells you to take 3 tablets a day. How many tablets do you need to buy for 7 days?

_____

3. Mariam's family has 6 members. They each have one pair of shoes. How many shoes are outside their house at night?

_____

4. Korpo's doctor told her she must drink more water so she wouldn't get headaches. She must drink 6 glasses of water every day. How many glasses of water will she drink in 3 days?

_____

5. To practice her writing, Bendu decided to write 8 new words every night. She writes each word 10 times. How many words will she write total every night?

_____

MODULE B

Lesson 43: Dividing Number without Remainder

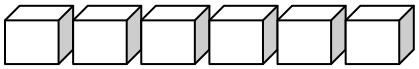
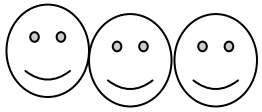
Learning Points:

- Division means to "share".

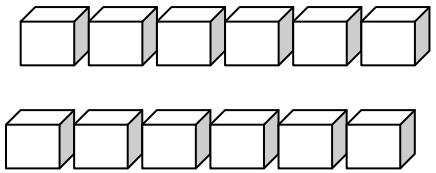
The sign for division is ÷

Directions: Solve these division problems:

Note: The first one is done for you.

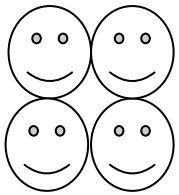
1.  **Divide by** (÷)  = $\frac{6}{3} = 2$

6 cartons 3 people

2. 

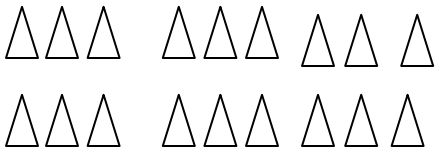
12 cartons

Divide by (÷)



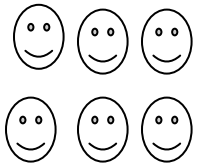
4 people

= _____

3. 

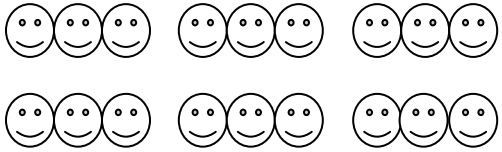
18 objects

Divide by (÷)



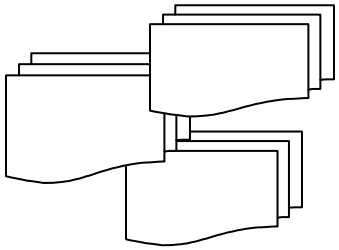
6 people

= _____

4. 

18 people

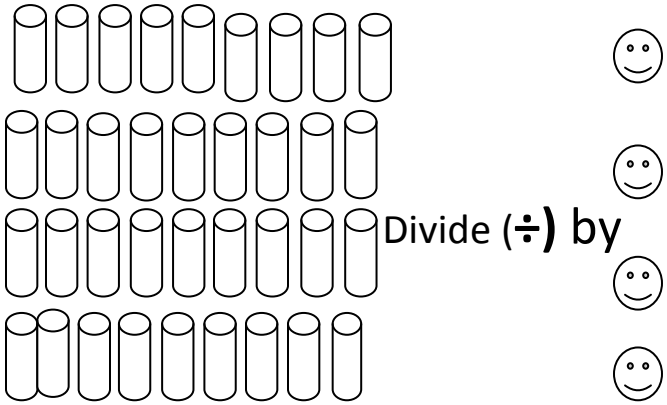
Divide by (÷)



9 sets of books

= _____

Directions: Do the following division problem:

5)  Divide (÷) by = _____

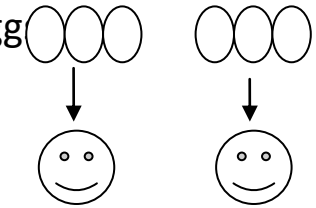
36 cups 4 people

MODULE B

Lesson 44: Division without Remainder, Part 2

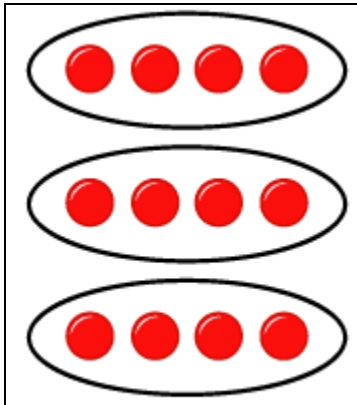
Using the multiplication chart

Learning Points:

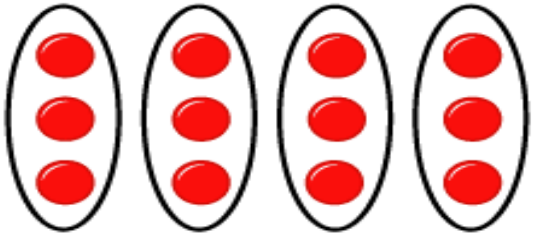
- Make sure the items or objects are shared into equal number.
- Each person receives equal number, no matter you age, position, or size.
  Example: 6 eggs divide by 2 people. Each person receives 3 eggs.
  = 6 egg 
- Division is the inverse of multiplication. 3 eggs x 2 = 6; 6 **÷2 = 3**

Directions: Write the answer for each question below:

Example



12 ÷ 4 = 3 **or 4 X 3 = 12**



12 ÷ 3 = 4

or 3 X 4 = 12

Write the answer for each question below:

Note: The first one is done for you.

1) 2 x 2 =4 As 4 ÷ 2 = 2

2) 2 x 3 = _____ As 6 ÷3 = _____

3) 2 x 4 =_____ As 8÷ 4 = _____

4) 3 x 3 = _____ As 9 ÷ 3 = _____

5) 5 x 2 = _____ As 10 ÷2 = _____

6) 2 x 7 = _____ As 14 ÷7 =_____

7) 5 x 3 =_____ As 15 ÷3= _____

8) 5 x 4 = _____ As 20 ÷ 4=_____

9) 3 x 6 = _____ As 18 ÷6 =_____

10) 5 x 6 =_____ As 30 ÷6=_____=

11) 12 = 3 x 4 As 12 ÷ 3 = _____

12) 48 = 6 x 8 As 48 ÷ 8 = _____

13) 27 ÷ 9 = 3 As 3 x _____ = 27

14) 5 x 5 = _____ As 25 ÷ 5 = _____

15) 8 x 3 = _____ As 24 ÷3 =_____

MODULE B

Lesson 45: Division Comes to Life - Story Problems

Learning Points:

- When you divide things, you want to ensure each gets equal share. Example: $10 ÷ 2 people = $5. This means each one will get $5. So if you multiply the $5 by 2 people, you get $10.

Solve these problems using simple division and the multiplication chart on the next page:

Note: The first one has been done for you.

1) Your Uncle comes to your house on Christmas day. He has exactly $60 LD to divide among the children in the house. If there are 6 children in the house, how much will each receive?

Step: $ 60 LD divide by 6 children = $10 LD each as 6 X 10 = 60 or 10 X 6 = 60

Directions: Use this multiplication chart to solve the problems on the next page:

Multiplication Chart											
X	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

2) Fatu borrowed $100 LD from her friend to buy Christmas things. After 5 days, she had paid it back. How much did she pay each day?

_____

3) Thelma has enough money to buy 48 vitamins. The doctor told her to take 6 vitamins a day since she is pregnant. How many days will the 48 vitamins last?

_____

4) Judy is one of the alternative basic education learners. They are 50 in the class and one day they received 100 copies of reading materials. If they intend to divide the books, how many books will each learner receive?

_____

MODULE B

Lesson 46: Practice with Multiplication and Division

Learning Points:

- Multiplication is inverse to division. Example: 3 X 30 = 90; 90÷30 = 3

Directions: Use either multiplication or division to solve the following problems:

Note: The first one is done for you.

1) Laura saves $3 LD every day. After 30 days, how much money will she save?	Answer: Laura saves how much per day? $3 For how many days? 30 days. How much does she save? We use multiplication: $3 x 30days = $90LD
2) Judy is organizing a party after her 3 years of studies at the alternative basic education class in Pleebo. She has asked those she invited to go in couples. 10 couples attended the party. How many people attended the party?	Answer:

MODULE B

Lesson 47: Simple Division with Remainder

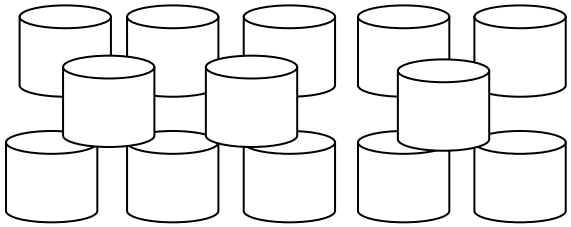
Learning Points:

- To show that division is not always perfect, that there is usually some left over.

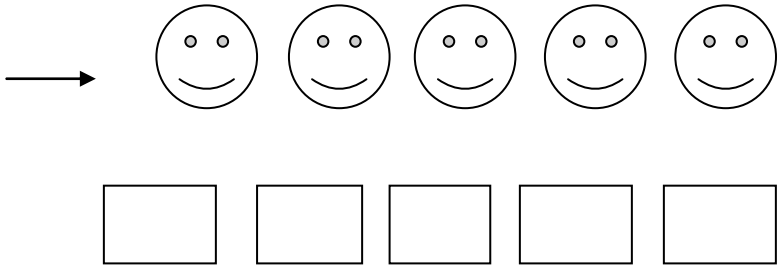
Directions: Divide these items among the people and show the remainder:

1)

13 Cups



5 People

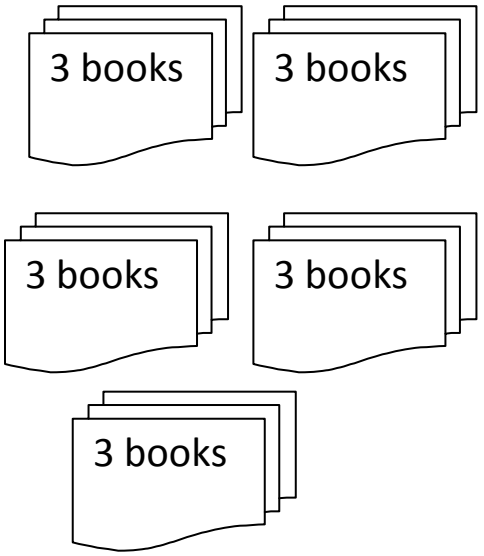


How many will each receive? Fill in the boxes:

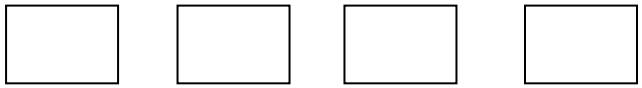
Remainder: ☐

Directions: Divide these items among the people and show the remainder: Write each person's share in the box below:

2)



4 People

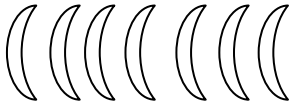


How many books each person will receive? Fill in the boxes:

Remainder: 

3)

7 pieces of Banana



3 children

How many banana each child receives? Fill in the boxes:

☐ ☐ ☐

Remainder: ☐

Directions: Carefully read and solve each story problem below:

1) If there are 19 books but there are 6 learners, how many books will each learner receive and how many is the remainder?

_____

2) If the teacher had 39 L$ and each marker was 9 L$, how many markers can he buy and how much money will be the remainder?

_____

3) If you had 49 lappas to sell and you sell the same amount to 6 people, how many lappas do each buy and how many lappas will be the remainder?

_____

MODULE B

Lesson 48: Quantities of Time

Learning Point:

- Time is divided into second, minute, hour, day, week, month and year.
- The smallest unit of time is second.

Match the number of the sentence in column A with the letter of each sentence in column B:

COLUMN A	COLUMN B
1) In one year there are _____months	a) ___7 Days
2) How many days make a week?	b) ___12 months
3) In one day there are how many hours?	c) ___60 minutes
4) In one month there are about___weeks	d) ___24 hours
5) In one hour there are ____minutes	e) ___365 days
6) In one minute there _____seconds	i) ____60 seconds

7) In one year there are _____days	k) _____4 weeks

Directions: Write the answer for each question below:

a) Ernest is to spend 30 days to do the numeracy training. He spends 22 days for the theory, how many days more does he have for the practical?

_____

b) Esther spends 5 hours to attend both alternative basic education class and tutorial every week. If she spends 2 hours and 30 minutes for the class, how many more hours does she have left for the tutorial?

_____

MODULE B

Lesson 49: Dividing One's Life

Learning Points:

- Life is divided into stages. For example: The life stages of an adult – 1) when he was in the mother's womb; 2) when he was a baby (learning to sit, talk, crawl, walk, eat); school age (pairing with his friends, learning how to read, write, construct sentences, etc); getting employment, taking responsibilities, getting involved in development, making decisions, etc.

- When you outline your life activities, you do it in fractional parts. In other words, each stage is a part of your entire life.

Place yourself in the age range you belong and state life activities that you went through:

Example: Yarkpawolo is 24 years

↔	↔	↔	↔
Birth – 5 years old	5-10 years old	10 – 15 years old	15 – 20 years old
	-learned how to speak, -started school	-re-grouping with peers -now in grade school -participating in household activities, etc	

It is your turn.

How old are you?
Write any major event/activity about your life at that time:

Birth – 10 years ↔	10 – 20 years ↔	20-30 years ↔	30 – 40 years

Draw two pictures to go with the words/activities in the table above.

MODULE B

Lesson 50: Introduction to the Concept of Fractions

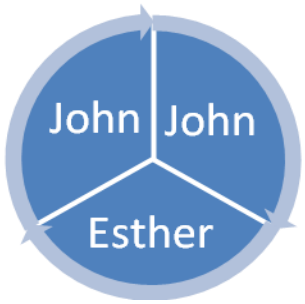
Learning Points:

- Fraction means “part of a whole”.

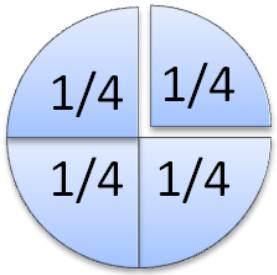
Write the fractions of these objects:

Note: The first one is done for you.

1) John has 2/3 (two parts) of the orange, Esther has 1/3 (one part) of the orange.



2) How many parts is the orange below divided into? If one part is given to Joe, how many parts are left?



Directions: Draw a circle and label the parts using these fractions:

a) 1/2

b) 1/4

c) 1/5

d) 1/6

e) 1/8

MODULE B

Lesson 51: Fraction Concepts Continued…

Learning Points:

- Fraction means “part of a whole.
- In fractions, the number above the line is called “numerator”, and the number below the line is called “denominator”.
- The numerator tells how many parts of an object is taken away.
- The denominator tells how many parts an object is divided into.
- Example:

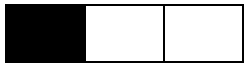
$$\frac{1}{3}$$

1 → Numerator

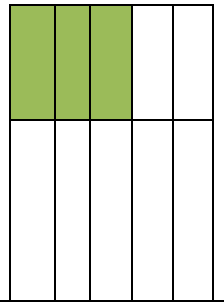
——— → Fractional bar or line

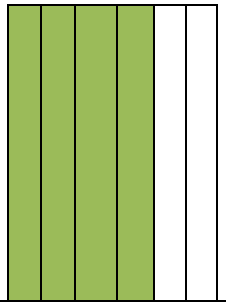
3 → Denominator

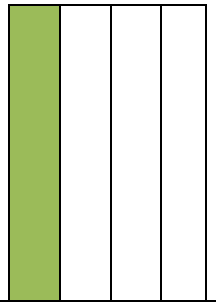
This object is divided into three parts.
One part is shaded.

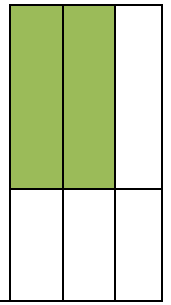


Directions: Name the shaded part(s) of each object in fraction.

1) 

2) 

3) 

4) 

1) _____ 2) _____ 3) _____ 4) _____

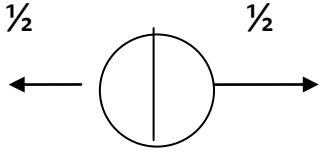
MODULE B

Lesson 52: Fractions with Different Shapes

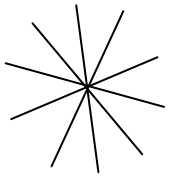
Learning Points:

Fraction means “part of a whole”.

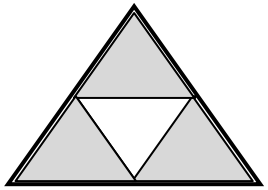
- Fractional pieces must all be equal size. Example: To divide an orange between 2 learners, each learner gets half of the orange.



Draw a circle around the object. Then shade some of the spaces so that you create a fraction in a pie chart. And write the number of spaces in fraction:

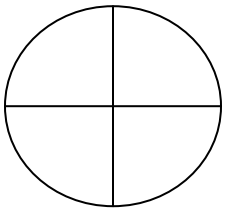


Directions: Write the fraction of the shaded parts of the triangle:

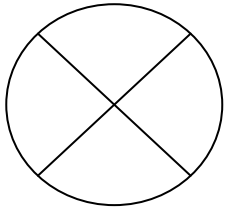


Directions: Write the answer in fractions:

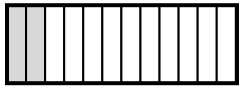
1) If two spaces are shaded, what is the fraction of the circle?



2) Esther received this orange and decided to share with 3 other friends. How many pieces will each receive?



3) Two parts of this rectangle are taken away. Write the fraction to show these parts:



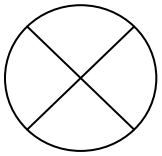
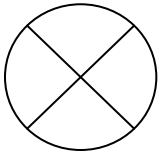
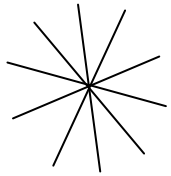
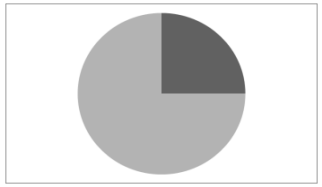
MODULE B

Lesson 53: Using a Circle Graph to Show Information

Learning Points:

- Fraction is used to interpret information from a simple circle graph. For example: The population of a learner class: how many are boys; how many are girls; how many can now write numbers, etc.

Directions: What fractions of the following circles are shaded? Shade and write the answer in each box below:

Two shaded	Three shaded	Five shaded	One shaded
			

Directions: What are the fractions of the parts of the objects above that are not shaded? Write the answer in each box below:

End of Module B